

Applicants: Fritz et al.
Serial No.: 10/619,644
Filing Date: July 14, 2003
Docket No.: ZIL-553

REMARKS

Reconsideration and allowance is respectfully requested.

Before entry of this amendment, claims 1-30 were pending. In the Office Action, claims 1-30 were rejected. In the present amendment, no claims are amended, and claims 31-36 are added. After entry of the amendment, claims 1-36 are pending.

I. Interview Summary Pursuant to 37 CFR 1.133(b)

On January 17, 2007, Examiner Lohn and Applicants' attorney discussed the Office Action (hereafter "Interview"). In particular, the Examiner clarified differences between the disclosure of "microprogram" in Tegethoff and "script" in Applicants' claims as well as possible ways to argue claim allowability of pending claims over the cited art and possible ways to amend claims to be allowable over the cited art. In the Interview, the Examiner clarified that Tegethoff discloses that microprogram code is derived from script by interpretation of the script. In the Interview, possible ways to argue claim allowability of pending claims over the cited art and possible ways to amend claims to be allowable over the cited art encompassed clarification of "script". No agreement was reached. Applicants appreciate the Examiner's willingness to discuss the rejection.

II. Claims 1-3, 5-9, 11-13, 15-16, 18-26, 28, and 29

Claims 1-3, 5-9, 11-13, 15-16, 18-26, 28, and 29 are rejected under 35 U.S.C. § 102(b) as being anticipated by Tegethoff et al. (USP 5,937,154) (Office Action, p. 4, lines 21-22). As is well known, a *prima facie* case of anticipation under 35 U.S.C. § 102(b) requires:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). ... The identical invention must be shown in as complete detail as is contained in the ... claim."

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Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)." (MPEP 2131) (emphasis added).

A. Independent Claim 1

Claim 1 recites: "a script interpreter executing on the debugging device, the script interpreter receiving a script from the host computer". Tegethoff does not form the basis for a valid rejection under § 102(b) because Tegethoff does not disclose all of the limitations of claim 1. Specifically, Tegethoff does not disclose the cited portion of claim 1. Applicants respectfully submit that the Examiner has improperly equated Tegethoff's disclosure of "microprogram" with "script" recited in claim 1.

The Examiner states that Tegethoff, col. 9, lines 19-33, teaches the cited portion of claim 1. (Office Action, page 5, lines 6-8). The Examiner responds to Applicants' reasons why Tegethoff does not disclose the cited portion of claim 1 by stating:

"The ability of the system probe of Tegethoff to execute code directly and interactively shows that it is interpreting the test script to provide for debug execution functionality, see column 9, lines 24-27. Applicant further argues that the system probe only executes microprogram based functional test code, and does not receive the test script files, however the examiner feels that since the microprogram code is generated as a part of the test script, in the execution of the script, the receipt of this code is functionally equivalent to receiving the test script files. Applicant also argues that Tegethoff does not mention "interpreting" or an "interpreter". However, examiner feels that the execution of the test script file commands means that some form of interpretation must occur. Interpretation would have been required as some part of the script execution disclosed by Tegethoff, col. 9, lines 19-27." (Office Action, page 2, lines 9-18) (emphasis added).

As is well known, during patent examination, the pending claims must be given their broadest reasonable interpretation consistent with the specification. (MPEP 2111) (emphasis added). Applicants' specification describes one example interpretation of "script" of claim 1 as:

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"scripts received from the host computer onto the DTLi interpreter are presented as NULL terminated ASCII text." (Paragraph [0054], lines 1-2) (emphasis added).

Other interpretations of "script" are possible and are not excluded from the scope of claim 1. By contrast, Tegethoff clearly defines "microprogram" by disclosing:

"A microprogram as used hereinafter is a sequence of elementary machine level instructions which correspond to computing device operations and whose execution is initiated by the introduction of a computing device instruction into an instruction register of the computing device." (Tegethoff, col. 3, lines 7-12) (emphasis added).

It is well known that machine level instructions are a form of instructions that have been compiled, assembled, and/or linked and are directly executable by a machine. By contrast, execution of script uses a script interpreter. Moreover, the Examiner admits that "microprogram code" is different from "script" by stating:

"since the microprogram code is generated as a part of the test script, in the execution of the script, the receipt of this code is functionally equivalent to receiving the test script files". (Office Action, p. 2, lines 13-15) (emphasis added).

Furthermore, in the Interview, the Examiner stated that "microprogram code" is derived from interpretation of script.

The passage of Tegethoff cited by the Examiner against the cited portion of claim 1 discloses a test host 32, a computing system probe 34 and a computing device 36. The cited passage of Tegethoff also discloses "test script files". Tegethoff does not disclose, however, that the test script files are ever received by the computing system probe 34 from the test host 32. Instead, the test script files are executed on the test host 32. Then "microprogram based functional test code" is executed by the computing system probe 34. Tegethoff explains:

"Microprogram based functional test generation may be accomplished in one of three ways. A most basic implementation would allow the user to write his own microprogram based functional test and test script files which would be executed on the test host 32.

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Calls from the test script files via a command to the computing system probe 34 either causes the microprogram based functional test to be executed directly from the computing system probe 34 in an interactive mode via the computing device debug port 38, or causes the microprogram based functional test to be downloaded into memory of the computing device 36 and executed in batch mode from the memory. Results from the microprogram based functional test may be returned to the test host 32 from the computing system probe, or may be observed through any I/O device. In a more advanced implementation, automatically generated test files which test memory and I/O could be generated and executed as above. A third implementation might provide a utility for translating boot ROM microprogram based functional test code into tests residing in files on the test host 32 which can be executed by the computing system probe 34." (Tegethoff, col. 9, lines 19-39) (emphasis added)

In another passage, Tegethoff also explains that a "shell script" is executed on the test host 32. Tegethoff states, "In this example, 'lanload' is a command executed from a Unix shell on the test host 32 that executes a batch test on the computing system probe 34 via LAN" (Tegethoff, col. 11, lines 25-28) (emphasis added). Tegethoff also states that the test script of another embodiment executes on a test host 72. Tegethoff states:

"As shown in FIG. 7, the board tester 71 includes a test host 72 and computing system probe 73 such as those used in the embodiment of FIG. 3 . . .

. . . In a step 85, an operator or a test script executing on the test host 72 directs the computing system probe 73 to commence execution of the microprogram based functional test directly from the board/MCM memory 78 via an execute command sent to the debug port 76 on the board/MCM under test 75." (Tegethoff, col. 13, line 66 – col. 14, line 30) (emphasis added).

Therefore, Tegethoff does not disclose either (i) a script interpreter executing on a debugging device, or (ii) a script interpreter on a debugging device receiving a script from a host computer. Because Tegethoff does not disclose all of the elements of claim 1, reconsideration of the § 102(b) rejection and allowance of claim 1 are requested.

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B. Dependent claims 2-3 and 5-9

Claim 7 recites “the script is not compiled on the host computer, and wherein the script is not compiled on the debugging device”. The Examiner states that the Tegethoff discloses the cited portion of claim 7 at col. 9, lines 19-30. (Office Action, page 6, lines 6-9). Tegethoff does not form the basis for a valid rejection under § 102(b) because Tegethoff does not disclose all of the limitations of claim 7. At the cited portion, Tegethoff discloses generation of “microprogram code” in response to execution of script and transmission of “microprogram code” to probe 34. (Tegethoff, col. 9, lines 19-39). In the Interview, the Examiner stated that “microprogram code” is derived from interpretation of script. “Microprogram code” is well known as being a compiled, assembled, and/or linked form of a program and is directly executable by a machine.

Claim 8 recites that “there is no operating system stored on the debugging device”. (Emphasis added). The Examiner disagrees with Applicants that Tegethoff does not disclose the cited portion of claim 8 by stating:

“With respect to applicant's arguments, relating to claim 8, that Tegethoff does not disclose a lack of operating system on the computer system probe, the examiner respectfully disagrees. Tegethoff discloses, in column 10, lines 5-15, that the microprogram of the probe is ideally used to avoid the need to boot the operating system and its related diagnostics on the computer system. The fact that, ideally, the code execution of the computer system probe is to avoid the loading of the operating system and the operating system is on the computer system, and not the probe, shows that Tegethoff teaches of a debugging device, in the form of the system probe, that does not contain an operating system.” (Office Action, page 2, line 19 to page 3, line 4) (emphasis added).

Tegethoff does not form the basis for a valid rejection under § 102(b) because Tegethoff does not disclose all of the limitations of claim 8. Tegethoff discloses that booting an operating system can be avoided, not that probe 34 stores no operating system. The cited portion of Tegethoff states that

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"microprogram based functional test 35 could be improved to achieve very high fault coverage levels, which would potentially eliminate the need for booting the operating system". (Tegethoff, col. 10, lines 11-13) (emphasis added). In other portions of Tegethoff, Tegethoff discloses that an operating system is stored. For example:

"The software diagnostic test portion of the board functional test require the system to be booted up and are run from the operating system level." (Tegethoff, col. 3, lines 21-24).

"System test is similar to board level functional test but relies more on operating system diagnostics in addition to the ROM based microprogram based functional test." (Tegethoff, col. 3, lines 52-55).

Tegethoff implies that the computing system probe 34 has an operating system:

"The computing system probe 34 may run a microprogram based functional test The microprogram based functional test 35 could be improved to achieve very high fault coverage levels, which would potentially eliminate the need for booting the operating system and running diagnostics which require long execution time at the board level." (Tegethoff, col. 10, lines 5-14) (emphasis added).

Moreover, Tegethoff, col. 10, lines 5-14, implies that the computing system probe 34 stores an operating system by disclosing that booting an operating system can be avoided.

Claims 2-3 and 5-9 depend directly or indirectly from claim 1. In addition to the reasons stated above, claims 2-3 and 5-9 are allowable for at least the same reasons for which claim 1 is allowable. Reconsideration of the § 102(b) rejection and allowance of claims 2-3 and 5-9 are requested.

C. Independent Claim 11

Claim 11 recites: "receiving a script from a host computer onto a hardware debugging device, . . . ; interpreting the script". Tegethoff does not form the basis for a valid rejection of claim 11 under § 102(b) because Tegethoff does not disclose the cited portion of claim 11. Applicants respectfully submit that the

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Examiner has improperly equated Tegethoff's disclosure of "microprogram" with "script" of claim 11.

The Examiner rejects a version of the quoted portion of claim 11, prior to its amendment in the response dated September 1, 2006, by citing col. 9, lines 12-18 and 19-60 of Tegethoff (Office Action, page 6, lines 19-22). In addition, the Examiner responds to Applicants' reasons why Tegethoff does not disclose the quoted portion of claim 11 by stating:

"With respect to applicant's arguments, relating to claim 11, that Tegethoff does not disclose receiving a script onto a hardware debugging device and interpreting the script, the examiner respectfully disagrees. The examiner feels that these functions are sufficiently carried out by the system probe of Tegethoff, as detailed in the arguments relating to claim 1 above." (Office Action, page 3, lines 8-11)

Tegethoff does not disclose "receiving a script from a host computer onto a hardware debugging device . . . interpreting the script". Tegethoff also does not disclose that a script is loaded into the computing system probe 43, as the Examiner implies. Instead of a script, a microprogram based functional test is downloaded to the computing system probe 34. (Tegethoff, col. 9, lines 8-18).

Applicants respectfully submit that "microprogram" is not "script" of claim 11. Microprogram is a compiled, assembled, and/or linked form of code and is executable directly by a machine whereas execution of script uses a script interpreter. For example, Applicant's specification at paragraph [0054], lines 1-2, states that one form of "script" can be ASCII text, although other implementations of script are not excluded.

Tegethoff does not disclose either (i) receiving a script from a host computer onto a hardware debugging device, or (ii) interpreting the script. Because Tegethoff does not disclose all of the elements of claim 11, reconsideration of the § 102(b) rejection and allowance of claim 11 are requested.

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D. Dependent Claims 12-13, 15-16, and 18-19

Claims 12-13, 15-16, and 18-19 depend directly or indirectly from claim 11. Claims 12-13, 15-16 and 18-19 are allowable for at least the same reasons for which claim 11 is allowable. Reconsideration of the § 102(b) rejection and allowance of claims 12-13, 15-16, and 18-19 are requested.

E. Independent Claim 20

Claim 20 recites: “A debugging device comprising: . . . means for receiving a script from the host computer, . . . the means also being for interpreting the script”. Tegethoff does not form the basis for a valid rejection under § 102(b) because Tegethoff does not disclose all of the limitations of claim 20. Specifically, Tegethoff does not disclose the cited portion of claim 20. Applicants respectfully submit that the Examiner has improperly equated Tegethoff’s disclosure of “microprogram” with “script” of claim 20.

The Examiner rejects the quoted portion of claim 20 by citing col. 8, line 50 to col. 9, line 18 of Tegethoff (Office Action, page 8, lines 15-19). In addition, the Examiner responds to Applicants’ reasons why Tegethoff does not disclose the quoted portion of claim 20. In the response, the Examiner states that:

“With respect to applicant’s arguments, relating to claim 20, that Tegethoff does not disclose a debugging device with means for receiving a script and interpreting the script, the examiner respectfully disagrees. The examiner feels that these functions are sufficiently carried out by the system probe of Tegethoff, as detailed in the arguments relating to claim 1 above.” (Office Action, page 3, lines 19-22).

Tegethoff does not disclose “debugging device comprising: . . . means for receiving a script from the host computer”. The passage of Tegethoff cited by the Examiner (col. 8:50 – col. 9:18) does not disclose that computing system probe 43 has a “means for receiving a script”. Instead of a script, a microprogram based functional test is downloaded to the computing system probe 43. (Tegethoff, col. 9, lines 8-18). Applicants respectfully submit that “microprogram” is not “script” of claim 20. Microprogram is a compiled,

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assembled, and/or linked form of code and is directly executable by a machine whereas execution of script uses a script interpreter. For example, Applicant's specification at paragraph [0054], lines 1-2, states that one form of "script" can be ASCII text, although other implementations of script are not excluded.

Tegethoff does not disclose either (i) a debugging device comprising means for receiving a script from a host computer, or (ii) a debugging device comprising means for interpreting the script. Because Tegethoff does not disclose all of the elements of claim 20, reconsideration of the § 102(b) rejection and allowance of claim 20 are requested.

F. Dependent Claims 21-24

Claim 22 incorporates the following limitation from base claim 20, "debugging device comprising: . . . means for receiving a script from the host computer", and recites "the script is a non-compiled string of text characters received onto the means from the host computer". Tegethoff does not disclose "debugging device comprising: . . . means for receiving a script from the host computer". The passage of Tegethoff cited by the Examiner (col. 8:50 – col. 9:18, col. 11, lines 5-23, and col. 11, lines 30-35) does not disclose that computing system probe 43 has a "means for receiving a script". Instead of a script, a microprogram based functional test is downloaded to the computing system probe 43. (Tegethoff, col. 9, lines 8-18). Microprogram is a compiled, assembled, and/or linked form of code and is directly executable by a machine. By contrast, claim 22 recites that "the script is a non-compiled string of text characters received onto the means from the host computer".

In addition, claims 21-24 depend from claim 20 and are allowable for at least the same reasons for which claim 20 is allowable. Reconsideration of the § 102(b) rejection and allowance of claims 21-24 are requested.

G. Independent Claim 25

Claim 25 recites "a script interpreter executing on the debugging device,

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the script interpreter receiving a script from the host computer". Tegethoff does not form the basis for a valid rejection under § 102(b) because Tegethoff does not disclose all of the limitations of claim 25. Specifically, Tegethoff does not disclose the cited portion of claim 25. Applicants respectfully submit that the Examiner has improperly equated Tegethoff's disclosure of "microprogram" with "script" recited in claim 25.

The Examiner rejects the cited portion of claim 25 by citing Tegethoff, col. 9, lines 19-33 and col. 11, lines 1-25. (Office Action, page 9, lines 20-22). However, in the cited passages, Tegethoff discloses a microprogram based functional test is executed on the computing system probe 34 (Tegethoff, col. 9, lines 25-26) and that a "shell script" is executed on the test host 32. Tegethoff states, "In this example, 'lanload' is a command executed from a Unix shell on the test host 32 that executes a batch test on the computing system probe 34 via LAN" (Tegethoff, col. 11, lines 25-28) (emphasis added). Applicants respectfully submit that "microprogram" is not "script" of claim 25. Microprogram is a compiled, assembled, and/or linked form of code and is directly executable by a machine whereas execution of script uses a script interpreter. For example, Applicant's specification at paragraph [0054], lines 1-2, states that one form of "script" can be ASCII text, although other implementations of script are not excluded.

Tegethoff does not disclose either (i) receiving a script from a host computer onto a debugging device, or (ii) interpreting the script on a debugging device. Because Tegethoff does not disclose all of the elements of claim 25, reconsideration of the § 102(b) rejection and allowance of claim 25 are requested.

H. Dependent Claims 26, 28, and 29

Claim 26 recites "there is no operating system stored on the debugging device" (emphasis added). The Examiner rejects the cited portion of claim 26 by citing Tegethoff, col. 8, lines 3-7. (Office Action, page 10, lines 4-6).

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Tegethoff does not form the basis for a valid rejection under § 102(b) because Tegethoff does not disclose all of the limitations of claim 26. The cited portion of Tegethoff discloses “computing system probe as used hereinafter provides the ability to have run control of the computing device, and modify the contents of its memory, registers and I/O through an emulation debug port of the computing device” (emphasis added). The cited portion of Tegethoff describes operations that take place on computing device 36 as opposed to computing system probe 34. The cited portion of Tegethoff does not disclose “the probe operates without an operating system” as stated by the Examiner (Office Action, page 10, line 6).

Rather, in other passages, Tegethoff discloses that booting an operating system can be avoided, not that probe 34 stores no operating system. For example, Tegethoff states that “microprogram based functional test 35 could be improved to achieve very high fault coverage levels, which would potentially eliminate the need for booting the operating system”. (Tegethoff, col. 10, lines 11-13) (emphasis added).

In other portions of Tegethoff, Tegethoff discloses that an operating system is stored. For example:

“The software diagnostic test portion of the board functional test require the system to be booted up and are run from the operating system level.” (Tegethoff, col. 3, lines 21-24).

“System test is similar to board level functional test but relies more on operating system diagnostics in addition to the ROM based microprogram based functional test.” (Tegethoff, col. 3, lines 52-55).

In addition, Claims 26, 28, and 29 depend from claim 25 and are allowable for at least the same reasons for which claim 25 is allowable. Reconsideration of the § 102(b) rejection and allowance of claims 26, 28, and 29 are requested.

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III. Dependent Claims 4 and 30

Claims 4 and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tegethoff in view of "The Zen of Diagnostics", Published in Embedded Systems Programming, June 1990 ("Zen") (Office Action, p. 11, lines 9-11). To establish a *prima facie* case of obviousness, the Examiner must demonstrate three criteria. The MPEP § 2142 states:

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the reference (or references when combined) must teach or suggest all the claimed limitations." MPEP § 2142 (emphasis added).

A. Dependent Claim 4

Claim 4 includes the following limitation of base claim 1: "a script interpreter executing on the debugging device, the script interpreter receiving a script from the host computer" (emphasis added).

In the response to Applicants' reasons that claim 4 is allowable because neither Tegethoff nor Zen teaches the cited portion of claim 4, the Examiner states that "Tegethoff discloses such a script interpreter, as is detailed in the arguments relating to claim 1 above" (Office Action, page 4, lines 6-7).

Tegethoff and Zen do not form the basis for a valid rejection of claim 4 under § 103(a) because neither Tegethoff nor Zen teaches the quoted portion of claim 4. Although Tegethoff does teach "test script files", Tegethoff does not teach that the test script files are ever received by the computing system probe 34 from the test host 32. Instead, the test script files are executed on the test host 32. Then "microprogram based functional test code" is executed by the computing system probe 34. Applicants respectfully submit that "microprogram" is not "script" of claim 4. Microprogram is a compiled, assembled, and/or linked form of code and is executable directly by a machine whereas execution of script uses a script interpreter. For example, Applicant's specification at paragraph

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[0054], lines 1-2, states that one form of “script” can be ASCII text, although other implementations of script are not excluded.

Zen also does not teach a script interpreter executing on a debugging device. The test code programs of Zen are coded in 8088 assembly language. Zen does not mention scripts or interpreting.

Reconsideration of the § 103(a) rejection and allowance of claim 4 are requested.

B. Dependent Claim 30

Claim 30 includes the following limitation of base claim 25: “a script interpreter executing on the debugging device, the script interpreter receiving a script from the host computer”.

Tegethoff and Zen do not form the basis for a valid rejection of claim 30 under § 103(a) because neither Tegethoff nor Zen teaches the quoted portion of claim 30. Although Tegethoff does teach “test script files”, Tegethoff does not teach that the test script files are ever received by the computing system probe 34 from the test host 32. Instead, the test script files are executed on the test host 32. Then “microprogram based functional test code” is executed by the computing system probe 34. Applicants respectfully submit that “microprogram” is not “script” of claim 30. Microprogram is a compiled, assembled, and/or linked form of code and is executable directly by a machine whereas execution of script uses a script interpreter. For example, Applicant’s specification at paragraph [0054], lines 1-2, states that one form of “script” can be ASCII text, although other implementations of script are not excluded.

Zen also does not teach a script interpreter executing on a debugging device. The test code programs of Zen are coded in 8088 assembly language. Zen does not mention scripts or interpreting.

Reconsideration of the § 103(a) rejection and allowance of claim 30 are requested.

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IV. Dependent Claims 10, 14, 17, and 27

Claims 10, 14, 17, and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tegethoff in view of Cromer et al. (USP 6,263,373) (Office Action, p. 13, lines 1-3).

A. Dependent Claim 10

Claim 10 recites “wherein the script is communicated from the host computer to the debugging device”. Tegethoff and Cromer do not form the basis for a valid rejection of claim 10 under § 103(a) because neither Tegethoff nor Cromer teaches that “script is communicated from the host computer to the debugging device”.

The Examiner states that Tegethoff teaches “the debugging device, which receives test scripts (Tegethoff, col. 9, lines 29-30)” (Office Action, p. 13, lines 4-5). Applicants respectfully disagree. Tegethoff does not teach that computing system probe 34 receives a test script file. The passage of Tegethoff cited by the Examiner states, “Results from the microprogram based functional test may be returned to the test host 32 from the computing system probe, or may be observed through any I/O device” (Tegethoff, col. 9:30-33). The fact that microprogram based functional test code executes and produces results, and that those results are returned to the test host 32, does not teach that test script files are received by the computing system probe 43. Instead, the test script files of Tegethoff are executed on the test host 32. Then “microprogram based functional test code” is executed by the computing system probe 34. (See, e.g., Tegethoff, col. 9, lines 36-39). Tegethoff does not teach that the test script files are ever received by the computing system probe 34 from the test host 32.

Applicants respectfully submit that “microprogram” is not “script” of claim 10. Microprogram is a compiled, assembled, and/or linked form of code and is executable directly by a machine whereas execution of script uses a script interpreter. For example, Applicant’s specification at paragraph [0054], lines 1-2,

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states that one form of "script" can be ASCII text, although other implementations of script are not excluded.

Cromer also does not teach that a script is communicated from a host computer to a debugging device. In fact, Cromer does not mention scripts.

Because the combination of Tegethoff and Cromer does not teach all of the elements of claim 10, Tegethoff and Cromer do not form the basis for a valid rejection under § 103(a). Reconsideration of the § 103(a) rejection and allowance of claim 10 are requested.

B. Dependent Claims 14 and 17

Claims 14 and 17 depend directly or indirectly from base claim 11. Claims 14 and 17 both include the following limitation of base claim 11: "receiving a script from a host computer onto a hardware debugging device, . . .; interpreting the script". Tegethoff and Cromer do not form the basis for a valid rejection of claims 14 and 17 under § 103(a) because neither Tegethoff nor Cromer teaches the cited portion of claims 14 or 17. Neither Tegethoff nor Cromer even mentions interpreting.

Tegethoff teaches neither (i) a hardware debugging device that receives a script from a host computer, nor (ii) a script that is interpreted on a hardware debugging device. Tegethoff does not teach that the test script files of Tegethoff are ever received by the computing system probe 34 from the test host 32. Instead, the test script files of Tegethoff are executed on the test host 32, and then "microprogram based functional test code" is executed by the computing system probe 34. Applicants respectfully submit that "microprogram" is not "script" of claim 14 or 17. Microprogram is a compiled, assembled, and/or linked form of code and is executable directly by a machine whereas execution of script uses a script interpreter. For example, Applicant's specification at paragraph [0054], lines 1-2, states that one form of "script" can be ASCII text, although other implementations of script are not excluded.

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Cromer also teaches neither (i) receiving a script from a host computer onto a hardware debugging device, nor (ii) interpreting the script.

Because the combination of Tegethoff and Cromer does not teach all of the elements of claim 14 or claim 17, Tegethoff and Cromer do not form the basis for a valid rejection under § 103(a). Reconsideration of the § 103(a) rejection and allowance of claims 14 and 17 are requested.

C. Dependent Claim 27

Claim 27 depends from claim 25 and includes the following limitation of base claim 25: “a script interpreter executing on the debugging device, the script interpreter receiving a script from the host computer”. Tegethoff and Cromer do not form the basis for a valid rejection of claim 27 under § 103(a) because neither Tegethoff nor Cromer teaches the cited portion of claim 27. Neither Tegethoff nor Cromer even mentions interpreting.

Tegethoff teaches neither (i) a debugging device that receives a script from a host computer, nor (ii) a script executing on a debugging device. Tegethoff does not teach that the test script files of Tegethoff are ever received by the computing system probe 34 from the test host 32. Instead, the test script files of Tegethoff are executed on the test host 32, and then “microprogram based functional test code” is executed by the computing system probe 34. Applicants respectfully submit that “microprogram” is not “script” of claim 27. Microprogram is a compiled, assembled, and/or linked form of code and is executable directly by a machine whereas execution of script uses a script interpreter. For example, Applicant’s specification at paragraph [0054], lines 1-2, states that one form of “script” can be ASCII text, although other implementations of script are not excluded.

Cromer also teaches neither (i) a debugging device that receives a script from a host computer, nor (ii) a script executing on a debugging device.

Because the combination of Tegethoff and Cromer does not teach all of the elements of claim 27, Tegethoff and Cromer do not form the basis for a valid

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rejection under § 103(a). Reconsideration of the § 103(a) rejection and allowance of claim 27 are requested.

V. New claims 31-36

Applicants are adding new claims 31-36, each of which is supported by the specification and allowable over the cited references. No new matter is added.

VI. Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that the entire application (claims 1-36 are pending) is in condition for allowance. Applicants respectfully request that a timely Notice of Allowance be issued in this case. If the Examiner would like to discuss any aspect of this application, the Examiner is requested to contact the undersigned at (925) 550-5067.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

By 
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Date of Deposit: January 25, 2007

Respectfully submitted,



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